AZ Draft
Meter and Data Exception Notice
Process
(MADEN)
February 2000

## Introduction

The ESPs are recommending the MADEN process to the AZ UDCs. The purpose of this process is to establish a bi-directional communication for Meter and Data Exception issues, which is currently not available to Market Participants in AZ. This process will assist the market and the UDCs to produce timely bills to their mutual customers.

The process framework was modeled from the California Meter and Data Exception Process. While consistency is an important Market issue, workarounds due to system and costly system reworks by the UDC's and some ESPs should be considered in adopting this process.

The MADEN process achieves a uniformed process to resolve meter and meter read issues in a timely and efficient manner for the mutual benefits of our electric customers.

## **METER & DATA EXCEPTION NOTICE (MADEN)**

### **Objective**

The objective of the Meter & Data Exception Notice is to

- establish bi-directional communication.
- have timely resolution of metering reading and metering issues and integrate established dates for settlement.
- facilitate problem resolution and root cause analysis.

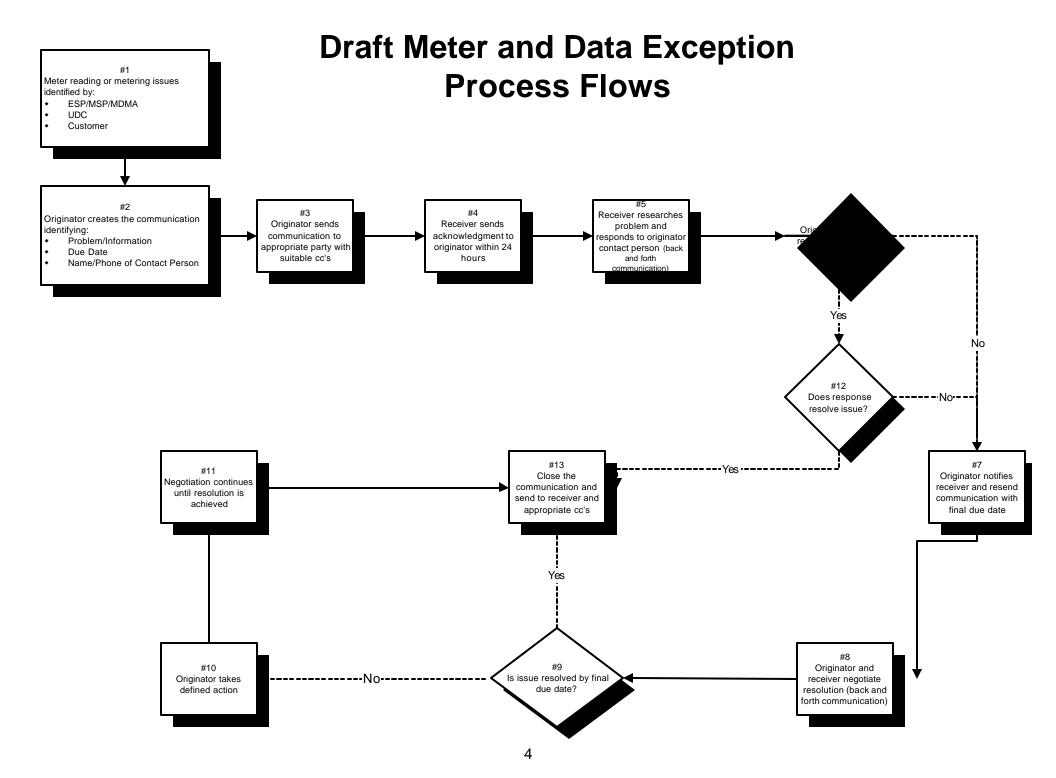
## **Purpose**

The METER & DATA EXCEPTION NOTICE (MADEN) process is used to formally communicate meter reading, billing and metering issues between ESP, Market Participants and the UDCs. The process is initiated by any market participant when the issue is an "exception" or outside the normal process. This process will be initiated each time there is a billing, meter reading or metering issues occur and communicated a minimum of daily.

#### **Process Overview**

- This process is not intended to be a statewide performance tracking for billing, meter reading or metering issues.
- When a billing, meter reading or metering issue exception has been identified by a UDC, ESP, MSP or MRSP a MADEN transaction should be sent to the appropriate party for resolution.

- Each MADEN will be identified by category standard type, status and due date. (refer to MADEN type Matrix). It is the responsibility of the originator to use the pre-established standards and establish the due date per the standard.
- It is the responsibility of the respondent to meet the due dates. The ESP is accountable for all actions on their behalf by sub-contractors.
- The originator will have the option to take appropriate actions if the deadline is not met.
- In cases where the response solves the immediate issue but not the root cause of the issue, the MADEN may remain open.
- The UDC's will send all MADENs to the ESP. The UDCs will send a copy to the MRSP of record as authorized by the ESP. If an originator has an issue it will be sent to the receiver as soon as possible, or the same day.
- The Originator is encouraged to transmit MADENs at a minimum on a daily basis.
- The due date for MADEN missing data is driven by settlement requirements. If the settlement time is changed, the MADEN process will comply with the new timeframe.



#### **MADEN General Information**

- 1. MADEN Contact information is established between the ESP and UDC. This will establish the communication requirements for the MADEN process with the UDC. (Registration Process)
- 2. The UDC, ESP, MSP or MRSP may initiate a METER & DATA EXCEPTION NOTICES. (If it's generated by other than ESP, the ESP must be copied.)
- 3. The originator will assign a unique number beginning with the ESP ticker symbol or ESP identifier. This will be required for each METER & DATA EXCEPTION NOTICE, one METER & DATA EXCEPTION NOTICE will be assigned to each billing, meter reading or metering issue.
- 4. The originator will complete provide the information using the pre-established METER & DATA EXCEPTION NOTICE Types and required time frames to the contact of record e-mail address as defined in the MADEN registration process. (See proposed Standard MADEN Matrix)
- 5. The Receiver acknowledges receipt within one business day.
- 6 The receiver completes the information required within the timeframe and sends the information to the designated e-mail as identified in registration process.
- 7. The UDC will copy the MRSP on all METER & DATA EXCEPTION NOTICEs sent to the ESP unless other arrangements are made in the MADEN registration process.
- 8. The METER & DATA EXCEPTION NOTICE will remain open until the ESP and or the UDC satisfactorily resolve the issue. It is the ESP responsibility to ensure the issue is closed and any issues on their behalf are completed on time.

# Meter Data Exception Notice – Standard Message Index

| CODE        | CATEGORY – METER SERVICES  |
|-------------|----------------------------|
| 3001 - 3002 | Safety                     |
| 3101        | General                    |
| 3100        | Miscellaneous (Scheduling) |
| 3203        | And/or MRSP Maintenance    |
| 3200 - 3201 | Maintenance                |
| 3300        | Non-Compliant              |

| CODE | CATEGORY – GENERAL COMMUNICATION |
|------|----------------------------------|
| 8001 | General Communications           |
| 8000 | Safety                           |

| CODE        | CATEGORY – MRSP |
|-------------|-----------------|
| 1103        | Read            |
| 1000 - 1004 | Data            |
| 1100 - 1102 | General         |

| CODE        | CATEGORY – ACCOUNT MAINTENANCE |
|-------------|--------------------------------|
| 9000 – 9001 | Account Maintenance            |

| Code | Category  | MADEN TYPE   | DESCRIPTION   | Maximum Required # of Days for Reply  | Action Item<br>(Minimum Text<br>Standard)   |
|------|---|--|---|---|---|
| 3001 | Meter Services -<br>Safety                        | Hazardous Condition- Meter Replaced                      | Situations where unsafe conditions exited-<br>Situation is corrected  | 3 days (follow normal<br>meter install process if<br>the Meter was removed) | <ul><li>Meter replaced</li><li>If joint meeting required call UDC Contact</li></ul>   |
| 3002 | Meter Services -<br>Safety                        | Hazardous Condition<br>Existed - Service<br>Disconnected | Situations where unsafe conditions existed. Situation is corrected. Example; there was a fire which caused the service to be disconnected | Notification  | N/A   |
| 3100 | Meter Services -<br>Miscellaneous<br>(Scheduling) | Joint Meet – Outside<br>of the Scheduling<br>Process     | Meeting of the UDC and an external party at the site (scheduling) Joint Meet required for - Substation access - Other                     | N/A   | Notification to MSP that Joint<br>Meet is required because<br>Meter and Data Exception<br>Notice – Standard Message<br>Reference Matrix |
| 3203 | Meter Services and/or<br>MRSP -<br>Maintenance    | Meter<br>Repair/Replacement                              | Meter requires repair or<br>replacement i.e.; glass<br>broken or Meter ID sticker<br>has fallen off the meter                             | 5 days  | Meter may need to be repair or replaced because   |
| 3200 | Meter Services -<br>Maintenance                   | Meter Test   | Test for meter accuracy because the bill may be too high or low   | 5 days  | Meter requires testing because If the UDC is able to provide the high or low Information it will be included in the Comment Section     |

| CODE | Category                             | MADEN TYPE                | DESCRIPTION  | Maximum Required # of Days for Reply (Note: Time must be adjusted to fit varying dates in cycles) | Action Item (Minimum Text Standard)  |
|------|--------------------------------------|---------------------------|--|---|--|
| 3201 | Meter Services -<br>Maintenance      | CT/VT Request             | Panel service upgrade N/A information  |   | Replace Meter<br>Provide Info<br>Return Meter  |
| 3300 | Meter Services –<br>Non-Compliant    | Non-Compliant<br>Install  | Action taken without<br>proper DA<br>procedure/protocol, No<br>DASR or Meter<br>information not provided   | 3 days  | <ul> <li>No DASR on File</li> <li>No Meter information submitted</li> <li>Meter information Missing</li> </ul> |
| 8001 | General<br>Communications            | Notification              | Communicating information – This may or may not require any action and or response from either the originator or receiver. Example: Used to communicate New Service or upgrades, irregular usage (could be temporary or permanent) | N/A   | Insert Concise info<br>UDC/ESP specific  |
| 8000 | General<br>Communication -<br>Safety | Safety Notification       | Communicating information which are safety related such as bad dog etc.  | N/A   | Insert Concise info  |
| 1103 | MRSP - Read                          | Non-scheduled<br>Read     | A read verification has been requested   | 5 days  | Read Required because  |
| 1000 | MRSP - Data                          | Missing Data – No<br>Data | No Data received, has data gaps  | SRD+5 days  | No data has been posted from to  |

| CODE | Category       | MADEN TYPE                                       | DESCRIPTION  | Maximum Required # of Days for Reply (Note: Time must be adjusted to fit varying dates in cycles) | Action Item (Minimum Text Standard)                              |
|------|----------------|--|--|---|--|
| 1001 | MRSP - Data    | Missing Intervals                                | Data received, has data gaps                       | SRD+5 Days  | Data received, has data gaps from XX/XX/XX to XX/XX/XX File Name |
| 1002 | MRSP - Data    | Incorrect Start and<br>End Time for<br>Intervals | Data does not meet expected start time or end time | SRD +5  | Post Data from XXXX to XXX                                       |
| 1100 | MRSP - General | Invalid File format                              | File Received invalid format                       | 1 Day   | Re-post in the correct format                                    |
| 1003 | MRSP - Data    | Missing KVARH                                    | File Received Missing<br>KVAR                      | SRD+5 days  | KVARH data has not been posted from to file File Name:           |

| CODE | Category            | MADEN TYPE                          | DESCRIPTION   | Maximum Required # of Days for Reply (Note: Time must be adjusted to fit varying dates in cycles) | Action Item<br>(Minimum Text<br>Standard)                      |
|------|---------------------|-------------------------------------|---|---|--|
| 1004 | MRSP - Data         | Usage Demand Out of normal range    | Usage Demand not characteristic of customer usage                         | SRD+5 days  | Data received from to is too high or too low                   |
| 1101 | MRSP - General      | Site – Access Issue<br>Missing Read | Unable to get the read due to an access problem (snow, inclement weather) | SRD+5 Days<br>Seasonal  | Unable to gain access due to                                   |
| 9000 | Account Maintenance | Read Cycle change<br>(Optional Use) | Notification by the UDC of a customer read cycle                          | 30 days prior to cycle change   | Read cycle changed from XX to read cycle YY effective XX/XX/XX |

| CODE | Category                   | MADEN TYPE                                     | DESCRIPTION   | Maximum Required # of Days for Reply (Note: Time must be adjusted to fit varying dates in cycles) | Action Item (Minimum Text Standard)  |
|------|----------------------------|--|---|---|--|
| 9001 | Account Maintenance        | Turn Off<br>(Optional Use)                     | Customer has requested power be discontinued at the site on a specific date  Change in ownership  Site being demolished  Purposes for MRSP Polling  | N/A   | Service will be turned off XX/XX/XX Poll Meter hourly from midnight until turn off (?) |
| 1102 | MRSP - General             | Meter ID Mismatch                              | (ESP/UDC/MRSP) Meter doesn't match or cannot be found in the UDC or ESP records (depends on who originates) Meter Removed and the meter is not updated with the UDC or the ESP doesn't match me Duplicate number. | SRD+ 5 days   | Meter ID posted does not match Meter ID. Records show                                  |
| 3101 | Meter Services-<br>General | Meter<br>Install/Removal<br>Notice Discrepancy | There is a discrepancy in the meter form to the actual install information including MIRN not returned, late paperwork, not rescheduled   | TBD   | TBD  |

## **ESTIMATED FREQUENCY EVENT MAY OCCUR**

| CODE | Category  | MADEN TYPE   | DESCRIPTION   | Estimated Frequency Event may Occur |
|------|---|--|---|-------------------------------------|
| 3001 | Meter Services -<br>Safety                        | Hazardous<br>Condition- Meter<br>Replaced                | Situations where unsafe conditions exited-<br>Situation is corrected  | Twice a year                        |
| 3002 | Meter Services -<br>Safety                        | Hazardous Condition<br>Existed - Service<br>Disconnected | Situations where unsafe conditions existed. Situation is corrected. Example; there was a fire which caused the service to be disconnected | Twice a year                        |
| 3100 | Meter Services -<br>Miscellaneous<br>(Scheduling) | Joint Meet – Outside<br>of the Scheduling<br>Process     | Meeting of the UDC and an external party at the site (scheduling) Joint Meet required for - Substation access - Other                     | Weekly                              |
| 3203 | Meter Services and/or<br>MRSP -<br>Maintenance    | Meter<br>Repair/Replacement                              | Meter requires repair or replacement i.e.; glass broken or Meter ID sticker has fallen off the meter                                      | 30 times a year                     |
| 3200 | Meter Services -<br>Maintenance                   | Meter Test   | Test for meter accuracy because the bill may be too high or low   | Monthly                             |
| 3201 | Meter Services -<br>Maintenance                   | CT/VT Request  | Panel service upgrade information   | Monthly                             |
| 3300 | Meter Services –<br>Non-Compliant                 | Non-Compliant<br>Install                                 | Action taken without proper DA procedure/protocol, No DASR or Meter information not provided  | Monthly                             |
| 8001 | General<br>Communications                         | Notification   | Communicating information – does not require any action and or response   | Daily                               |
| 8000 | General Communication Safety  Mete                | Safety Notification er and Data Exception                | Communicating information which are Sofoty related ayes as bod don at a Notice – Standard Message Reference M                             | Monthly atrix                       |
| 1103 | MRSP - Read                                       | Non-scheduled<br>Read                                    | A read verification has been requested  | Weekly                              |
| 1000 | MRSP - Data                                       | Missing Data – No<br>Data                                | No Data received, has data gaps   | Daily                               |
| 1001 | MRSP - Data                                       | Missing Intervals  | Data received, has data gaps  | Daily                               |

| CODE | Category                   | MADEN TYPE                                       | DESCRIPTION   | Estimated Frequency Event may Occur |
|------|----------------------------|--|---|-------------------------------------|
| 1002 | MRSP - Data                | Incorrect Start and<br>End Time for<br>Intervals | Data does not meet expected start time or end time  | Daily                               |
| 1100 | MRSP - General             | Invalid File format                              | File Received invalid format  | Daily                               |
| 1003 | MRSP - Data                | Missing KVARH                                    | File Received Missing KVAR  | Daily                               |
| 1004 | MRSP - Data                | Usage Demand Out of normal range                 | Usage Demand not characteristic of customer usage   | Weekly                              |
| 1101 | MRSP - General             | Site – Access Issue<br>Missing Read              | Unable to get the read due to an access problem (snow, inclement weather)   | Monthly                             |
| 9000 | Account Maintenance        | Read Cycle change<br>(Optional Use)              | Notification by the UDC of a customer read cycle  | Monthly                             |
| 9001 | Account Maintenance        | Turn Off<br>(Optional Use)                       | Customer has requested power be discontinued at the site on a specific date  Change in ownership Site being demolished Purposes for MRSP Polling  | Weekly                              |
| 1102 | MRSP - General             | ID Mismatch                                      | (ESP/UDC/MRSP) Meter doesn't match or cannot be found in the UDC or ESP records (depends on who originates) Meter Removed and the meter is not updated with the UDC or the ESP doesn't match me Duplicate number. | Daily                               |
| 3101 | Meter Services-<br>General | Meter<br>Install/Removal<br>Notice Discrepancy   | There is a discrepancy in the meter form to<br>the actual install information including MIRN<br>not returned, late paperwork, not<br>rescheduled  | TBD                                 |

## **Meter and Data Exception Notice – Example of File Format**

| FIELD              | DESCRIPTION           | FIELD NAME | REQUIRED/OPTIONAL | FIELD<br>LENGTH | ALPHA/NUMERIC |
|--------------------|-----------------------|------------|-------------------|-----------------|---------------|
| Originator Name    | Sender Name           |            | R                 | 50              | А             |
| Originator ID      | Sender DUNS           |            | R                 | 10              | N             |
| UDC Name           |                       |            | R                 | 50              | A             |
| ESP Name           |                       |            | R                 | 50              | A             |
| ESP ID             | ESP DUNS              |            | R                 | 10              | N             |
| MADEN Number       |                       |            | R                 | 20              | AN            |
| MADEN Type         |                       |            | R                 | 20              | A             |
| Status             | Open/Closed           |            | R                 | 1               | A             |
| Date Sent          |                       |            | R                 | 10              | N             |
| Due Date           |                       |            | R                 | 10              | N             |
| Date Closed        |                       |            | R                 | 10              | N             |
| MRSP Name          |                       |            | R                 | 50              | Α             |
| MRSP ID            | MRSP DUNS             |            | R                 | 10              | N             |
| Contact Name       | Sender contact name   |            | R                 | 20              | A             |
| e-mail             |                       |            | R                 | 20              | A             |
| Phone              |                       |            | 0                 | 20              | N             |
| Fax                |                       |            | 0                 | 20              | N             |
| Customer Name      | End-use customer name |            | R                 | 50              | A             |
| Service Address    |                       |            | R                 | 50              | AN            |
| City               |                       |            | R                 | 30              | A             |
| Meter ID           |                       |            | R                 | 20              | AN            |
| UDC Account Number | er                    |            | R                 | 20              | N             |
| Action Required    | Standardized MADE     | N format   | R                 | 64k             | AN            |
| Comments           |                       |            | R                 | 64k             | AN            |
| Respondent ID      |                       |            | R                 | 10              | N             |
| Email              |                       |            | R                 | 20              | A             |
| Phone              |                       |            | 0                 | 20              | N             |
| Date Responding    |                       |            | R                 | 10              | N             |
| Comments           |                       |            | R                 | 64k             | AN            |

## **File Description**

- The standard message type will remain static unless formal edits are reviewed and agreed using the AZ Change Management
- E-mail or CSV transmission could be an interim solution until the process volume, speed or accuracy quality is an issue for the market.

| Title                        | Description  |
|------------------------------|--|
|                              |  |
| ESP ID                       | ESP Ticker Symbol  |
| UDC ID                       | UDC Ticker Symbol  |
| METER & DATA                 | Originator Ticker symbol followed by unique #  |
| EXCEPTION NOTICE #           |  |
| METER & DATA                 | (NOTE: REFER TO METER & DATA EXCEPTION NOTICE MATRIX for STATUS, TYPE and REQUEST STANDARD   |
| <b>EXCEPTION NOTICE TYPE</b> | RESPONSE TEXT)   |
| STATUS                       | New: First time METER & DATA EXCEPTION NOTICE Initiated  |
|                              | Resend: Data was previously sent for the same METER & DATA EXCEPTION NOTICE  |
|                              | Pending: METER & DATA EXCEPTION NOTICE not completed   |
|                              | Closed: METER & DATA EXCEPTION NOTICE has been completed   |
|                              | (NOTE: REFER TO METER & DATA EXCEPTION NOTICE MATRIX for STATUS, TYPE and REQUEST STANDARD RESPONSE TEXT)  |
| DUE DATE/Action Date         | Date Due (received on or before this date by 3:00 P.M.)  |
| DATE OPENED                  | Date METER & DATA EXCEPTION NOTICE sent to ESP   |
| DATE CLOSED                  | Date METER & DATA EXCEPTION NOTICE was closed by the Originator  |
| MRSP ID                      | MRSP Ticker Symbol   |
| MSP ID                       | MSP Ticker Symbol  |
| CONTACT NAME                 | Person questions can directed to regarding the METER & DATA EXCEPTION NOTICE   |
| E-MAIL                       |  |
| PHONE                        |  |
| FAX                          |  |
| CUSTOMER NAME                | Customer of Record   |
| ADDRESS                      | Customer Address   |
| CITY                         | Customer City  |
| METER ID                     | Specific Meter which has the issue   |
| UDC ACCOUNT NUMBER           | Service Account Number   |
| ESP ACCOUNT NUMBER           |  |
| Action Required              | Standard definition of the METER & DATA EXCEPTION NOTICE Request, specific to METER & DATA EXCEPTION NOTICE Type, in the case of missing data the specific file name will be required. (NOTE: REFER TO METER & DATA EXCEPTION NOTICE MATRIX for STATUS, TYPE and REQUEST STANDARD RESPONSE TEXT) |

| Comments (Originator) | Freelance area for any additional comments specific to the METER & DATA EXCEPTION NOTICE |
|-----------------------|--|
| Comments (Respondent) | Comments should be concise and meet the response requirements                            |